

The History

OF

Touch Typewriting



THE HISTORY
OF
TOUCH TYPEWRITING.

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IN 1867 the *Scientific American*, speaking of the model of a machine designed to do typewriting, then on exhibition before the London Society of Art, used the following prophetic words concerning the future of the writing machine :

“The weary process of learning penmanship in the schools will be reduced to the acquirement of writing one’s own signature and playing on the literary piano.”

Consider when these words were written ! In the year 1867 the three mechanics of Milwaukee had just begun the work which led to the creation of the Remington Typewriter. It was the year, therefore, from which dates the real history of the writing machine, but the year itself saw only the construction of the first crude and useless model. A practical typewriter was then unknown ; the very idea was unknown, or existed merely in the imagination of a few inventive minds. And yet note the words “*playing on the literary piano.*” They were suggested spontaneously in connection with the idea ; they were an unconscious prophecy which time has fulfilled. To realize its literal fulfillment let us make one broad leap to the present and read the following introduction to a standard manual on “touch writing” published in 1900.

“It is unnecessary to inform you that a person fairly skilled on the piano can read his notes without looking at the keyboard ; in other words he looks on the pages of his book or sheet of music and can

rapidly and readily, after practicing, manipulate the keys, even though the movements may be very intricate. We ask you to remember that, if you practice properly, if you work in the right way, practice is bound to give you the same ability on the typewriter.”

These two extracts, though separated in time by a third of a century in which is comprised the entire history of the writing machine, present a startling similarity of ideas. It is too much to say that they show that the idea of “ touch writing ”, in its specific sense, was born with the typewriter ; but they do show that, from the very moment that the typewriter was first thought of, the analogy of piano playing suggested itself as the logical and natural method of operating the writing machine.

This is essentially the idea of touch writing as it is to-day understood and practiced. To operate the machine with the eyes resting not on the keys but on the copy, as the eyes of the pianist rest on the score, to regulate the touch so that the best results are obtained, even as on the musical instrument, thus gaining time in the execution and excellence in the work ; these are the ends secured by the touch system, a system now universally regarded as the modern and up to date method of typewriting.

Many years, however, were destined to elapse after the invention of the typewriter before the idea was successfully developed in practice. This was not, as some imagine, because touch typewriting is inherently difficult. Everything is difficult when no one has ever done it, but everything becomes easy when some one has shown the way. In this the history of touch writing is like the history of everything else. It is

the pioneers who master the difficulties, not their followers, and the fact that these difficulties cease to be such when once mastered, constitutes the debt we owe to the pioneers.

Of the pioneers of touch writing there are four names, each associated with a special field, which deserve the foremost place. These names are as follows :

Mr. Frank E. McGurrin, a noted Remington operator, who was the first expert to use a touch system in writing on the machine.

Mrs. M. V. Longley, an instructor of typewriting on the Remington, who was the first business educator to employ a "touch system" in the instruction of pupils and also the first to publish a manual on the subject.

Mr. Bates Torrey, another pioneer, to whom belongs the credit of first coining and giving currency to the word "touch" as applied to the system.

Mr. H. V. Rowell, manager of the Remington Typewriter at Boston, Mass., who was the first typewriter man to see the future of the system and whose efforts first brought it into general use in the business schools.

There are other prominent names connected with the early history of touch writing but all of them are more or less subordinate to these four, whose contributions to the system we will now consider.

The First Touch Operator.

To Mr. Frank E. McGurrin, the first expert touch operator, belongs, in order of time, the leading place. The following interesting story of how Mr. McGurrin came to operate the typewriter by "touch" is thus told in his own words:

"I first began using the method in 1878 under the following circumstances. I was a clerk in the law office of D. E. Corbitt, in Grand Rapids, Mich. He bought a second-hand No. 1 (Remington) Typewriter, with the tin front and back, on which the carriage was pulled back by a string and a sledgehammer blow was required to depress the keys. My employer and I began practicing on it at the

same time and there was quite a rivalry between us for some months as to who could write the faster. Those were my first typewriting contests. Before long I could beat him so easily that he gave up the struggle. One day he came into the office and told some one else who was there that he had just been over to the office of Henry F. Welch, the official stenographer, and that Mr. Welch was dictating from his notes to a girl who was running the typewriter while looking out of the window. All this while she was writing from dictation at a very rapid rate. I afterwards learned



FRANK E. MCGURRIN.

that this was a fairy tale and only told in my presence to take the conceit out of me. However, boy like, I made up my mind that whatever a girl could do I could do, so I set to work to learn to operate without looking at the keyboard. I discarded my former method of two or three fingers and determined to use all of my fingers. Before the end of the year 1878 I could write upwards of 90 words a minute in new matter without looking at the keyboard. I did not meet the girl in Mr. Welch's office for two years after and then learned to my surprise that she did not operate the machine without looking at the keyboard and had never attempted to do so. I do not take any great credit for having thought of operating without looking at the keyboard for it is simply a matter of common sense, and the system of finger-ing is so simple that anybody could formulate it.

“ Mr. Welch is still the court reporter at Grand Rapids and can vouch for the fact that as early as 1878, I was operating the machine by touch.”

Everyone should be glad that Mr. Corbitt made this effort “to take the conceit out of” Mr. McGurrin, not because Mr. McGurrin needed any such medicine, but because the result was the development of an operator who was the first to demonstrate that “touch” writing was not an unattainable ideal, but could actually be accomplished with a saving of time and labor. This new achievement in typewriter operating immediately attracted wide attention. Mr. Theodore C. Rose, Vice-President of the International Convention of Shorthand Writers, at the meeting at Chicago in September, 1881, made the following reference to Mr. McGurrin's work:

“Within the past week I saw a young man in an office in Grand Rapids write on a test 97 words on the typewriter and read the copy. He did not look at the machine at all but kept his eyes on the copy. I know he wrote 97 words a minute because I held the watch.”

This utterance is also notable because it is probably the first reference to what we now know as the "touch system" contained in the reports of any of the conventions.

Mr. McGurrin, speaking of his early rivalry with Mr. Corbitt at the machine says, "those were my first typewriting contests." His later contests, to operators of the typewriter at least, are historic. For many years he proved by many "contests" and exhibitions that the Remington Typewriter and the touch system, each great in itself, were an invincible combination which no other machine and no other system could approach. The most notable of these contests was the one between McGurrin and Traub decided at Cincinnati on July 25, 1888. Mr. Louis Traub was an instructor in typewriting and an agent and expert operator of the leading double keyboard machine of that day. Both in the machine used and the method used he stood in opposition to Mr. McGurrin. The keen rivalry between the two led to many challenges and counter challenges and finally resulted in the match at Cincinnati. The conditions of the contest called for forty-five minutes writing from dictation and forty-five from copy, unfamiliar matter being used. As these two men were regarded as the leading operators in the country the contest attracted wide attention. The account of what happened is thus told in the columns of the *Cincinnati Enquirer*:

"It was a brilliant performance on the part of both men. It was evident that Mr. Traub could operate faster than his machine would respond and he was to that extent placed at a disadvantage. Owing to the compactness of the Remington keyboard Mr. McGurrin was

enabled to copy without looking at the keyboard at all and he could have taken the dictated matter nearly if not quite as well blindfolded. He displayed marvelous speed and won the purse, although Mr. Traub proved himself a worthy competitor * * *. At the end Mr. McGurrin had written from dictation 4294 words or 95 words per minute; from copying 4415 words or 98 words per minute. Mr. Traub wrote from dictation 3747 words or 83 per minute; from copying 3191 words or 71 words per minute. McGurrin beats Traub on the whole time 1771 words or 25.38 per cent."

The most notable fact in the comparative work of these men is the low speed of Mr. Traub when writing from copy. His speed as compared with his record on dictation declined from 83 words per minute to 71. On the other hand Mr. McGurrin's speed when writing from copy actually advanced from 95 words to 98. The reason is obvious. Mr. McGurrin's eyes were always on the copy while his opponent was compelled to write an "eyeful" at a time.

Mr. Traub was open to conviction and accepted the logic of the result without reserve. He conceded that it was the machine that beat him because he could not operate the double keyboard machine without looking at the keys. Three days after the contest he wrote to the *Phonographic World* that in future he would use and advocate only the Remington. He replaced all of the double keyboard machines in his school with Remingtons and subsequently became an expert touch operator on that machine.

After this match Mr. McGurrin, the Remington Typewriter and the touch system formed a combination which carried all before them. In August of the same year, at the Metropolitan Typewriting Contest at

New York, Mr. McGurrin in five consecutive minutes wrote 494 words. Afterwards, to show his complete mastery of the keyboard, he was blindfolded and wrote from dictation at the rate of 101 words per minute. In September at Lake George he again wrote blindfolded from dictation at 109 words per minute. Ordinary court reporting matter was dictated and there were only two errors in the transcript. These continued exploits of Mr. McGurrin soon found their echo in the work of other expert operators who were doubtless stimulated by the force of his example. In September, 1889, Mr. F. J. E. Akers of Chicago wrote 76 words per minute on the Remington without looking at the keyboard. In the same month a more notable performance was given by Mr. A. H. Briggs of Bay City, Mich. He wrote 125 words per minute on the Remington, and subsequently 116 words per minute blindfolded. Mr. McGurrin continued his exhibitions for a number of years, reaching at times as high a speed as 125 words per minute on unfamiliar matter. He is now a resident of Salt Lake City, where he was for some years a court reporter, and where he is at present conducting a prosperous banking business.

The great skill shown by Mr. Frank E. McGurrin as an operator, coupled with his position as the original exponent of the touch method, entitle him to be regarded as beyond all question the greatest of the typewriting experts. His actual performances may since have been equalled or nearly equalled by some of the younger operators but his position as the pioneer touch operator is one which nothing can impair. His opinion, consequently, on all subjects pertaining to the technique of touch writing is one from which there can hardly be an

appeal. It is noteworthy, therefore, that Mr. McGurrin on all occasions attributed his success to the Remington Typewriter. Its even touch and compact keyboard alone rendered possible the full development of his art.

Early Educators.



MRS. M. V. LONGLEY.

The above review of the work of Mr. Frank E. McGurrin has carried us ahead of our subject and we will now retrace our steps. Mr. McGurrin's performances had a great effect in drawing attention to his method, but in securing the general adoption of this method there were limits to the results which could be accomplished by any single operator. Doubtless his very expertness as an operator tended in a sense

to limit his influence. The habit of operators generally, at the time, was to regard Mr. McGurrin as a phenomenon who was beyond their range. His work had shown that touch writing was pos-

sible ; it did not and could not show that it was feasible for the average operator. This was something that mere illustration could never accomplish. To make touch writing practical was the field of the instructor and we will now consider the pioneer educators who, more than anyone else, have made possible the general spread of the system.

The first business school to begin systematic instruction to pupils by the touch method, or the all finger method as it was then called, was Longley's Shorthand and Typewriter Institute of Cincinnati. The credit for the introduction of this system belongs to Mrs. M. V. Longley. Mrs. Longley is the widow of the late Mr. Elias Longley, whose name is well known to the shorthand fraternity in America through his prominent association with the development of phonography. On the subject of the all finger method Mrs. Longley writes as follows:

“ It was in the year 1880 that Mr. Longley brought home the first No. 2 Remington Typewriter. I became interested and fascinated by it, and, although at that time I had no thought of ever teaching its use, in order to be able to operate the machine in a proper manner, I carefully read the little book of instructions which came with it. But I wondered that the instructions were to use only one finger of each hand, or possibly two of the right. Why not use all the fingers? — I asked.”

In 1881 Mr. Longley opened his Phonographic and Typewriter Institute in Cincinnati and Mrs. Longley assumed charge of the typewriting department, which was equipped with Remington machines exclusively. Mrs. Longley immediately put her ideas into practice and met with such success in her own class rooms that in the following year (1882) her “Remington Typewriter Lessons” were published.

This was the first printed system for teaching the all finger method. At first the lessons were pasted on cardboard for convenience and durability in schools, but they were afterwards issued in book form. The advertisement describes the system as “a series of lessons and exercises—by a system of fingering entirely different from that of other authors and teachers”; a very conservative statement considering the radical departure it represented from the prevailing usage of the day.

At the First Annual Congress of Shorthand Writers, held at Cincinnati in 1882, Mrs. Longley read a paper on the all finger method, which attracted considerable attention. We quote the following extract from this paper as showing the persistence of the central idea already mentioned in connection with this system of typewriting:

“As well might a person expect to be a successful piano or organ player while using but two or three fingers of each hand as expect to be a successful typewriter operator while using only a part of the fingers to strike the keys of the instrument; and who would expect to be a successful pianist or organist unless all of the fingers and the thumbs were brought into use? With only a part of them engaged the time lost in carrying the hands back and forward over the keyboard to strike the different keys, as is necessary in such a case, is very considerable. But by utilizing all the fingers and thumbs, there need be almost no loss of time. If the hands are held over the keyboard the fingers will reach the extreme right and left, and each be in a position to do duty and the thumb will be in readiness to strike the space bar.”

In the year 1885 Mrs. Longley was compelled by the ill health of her husband to remove her permanent residence to California. Her influence, however, was continued through her instruction book and also

through the work of the pupils who had learned her system. Mr. Longley, writing to the *Phonographic World* from Los Angeles under date of March 22, 1886, tells the following interesting story concerning their son Howard Longley, who used this method in operating the machine:

“During a long breach of promise trial here last month in which ‘daily copy’ was required, the regular reporters and their amanuenses found themselves falling behind and, hearing of my son Howard Longley as a fast Remington Typewriter operator, he was called in to help them. His speed on the machine was soon the talk of the shorthand fraternity. The secret of his success may be found in the fact that he used all four of the fingers of each hand for manipulating the keys, and his thumb for spacing, in accordance with his mother’s instruction book; and now the slow writers are adopting the four finger method.”



H. V. ROWELL.

Mr. H. V. Rowell, the manager of the Remington Typewriter at Boston, Mass., was the first typewriter man to interest himself in the system and it was through his efforts that the method gained a secure foothold in the East. Mr. Rowell says that it was the paper read by Mrs. Longley at Cincinnati in 1882 which gave him his first inspiration on the subject. At the Fourth An-

nual Congress of the International Association of Shorthand Writers at Harrisburg, Pa., in August, 1884, Mr. Rowell read a paper from which we make the following quotation:

“We think too much importance cannot be attached to the great gain this manner of operating shows over the usual method, and that it can be acquired by a comparatively small amount of practice we know by our own experience. In regard to the amount of work accomplished we think that no better evidence can be given than the statement of the manager of a commercial agency who says that in his office is a young lady who does not write as rapidly as some of the other operators but who is never obliged to look at the keyboard of her machine, the result of which is that at the end of the day she has accomplished more work than any of the others.”

This extract from Mr. Rowell's paper brings out a point in connection with touch writing that should never be forgotten by the learners of that system. It is true that the all finger method in the end gives greater facility in operating the keys. This, however, is by no means the main factor in the greater speed of touch writers. The touch operator gets his principal advantage from the fact that his eyes never leave the copy, therefore there are no breaks in the continuity of his work. This fact was conclusively established in the match between McGurrin and Traub. Learners of the touch method, therefore, should be content to acquire speed in fingering slowly and never at the expense of accuracy. They can do this with the absolute certainty that a slow speed in touch writing counts for more than the apparently more rapid fingering of the old style operators.



W. E. HICKOX.

Prior to the date of the above paper the touch method had been adopted, at Mr. Rowell's suggestion, by Mr. W. E. Hickox in his private shorthand school at Portland, Maine. In point of time Mr. Hickox undoubtedly ranks next to Mrs. Longley as an instructor by the touch system and, like her, he used Remington Typewriters exclusively, a practice which he still continues. He began instruction in touch writing

as early as the year 1882 and has continued it without interruption to the present time. Mr. Hickox turned out many competent operators in these early years, some of whom are still at work on the machine.

The next business educator whom Mr. Rowell succeeded in interesting in the touch system was Mr. B. J. Griffin of Child's Business College, now the Springfield Business School, of Springfield, Mass. Mr. Griffin became a zealous convert to touch writing and in the year 1889 commenced regular instruction by the system. He was in fact the first of the many business educators now teaching the touch method who took up the system in a thorough and enthusiastic



B. J. GRIFFIN.

manner. Like all of his predecessors he used Remington Typewriters exclusively. Since the year 1889 Mr. Griffin's work has been a prominent factor in the development of the touch system. His book on touch typewriting, which appeared two years later was an important contribution to the subject. "Its aim and object," says Mr. Griffin in the preface, "is usefulness, particularly the mission of enabling persons to acquire the

art of correctly and rapidly operating the Remington No. 2 Standard Typewriter, without looking at the keyboard. In its compilation the author has been materially assisted by Mr. H. V. Rowell, New England agent for the Remington Typewriter Company, to whom this work is respectfully dedicated." Mr. Griffin's principal influence, however, has been exerted through the remarkable skill of some of the touch operators among his graduates, which has produced a deep impression on other business educators. Of these we will have more to say on another page.

The firm establishment of the touch system in the East dates from the year 1889. Within a few years after Mr. Griffin took up the matter

a number of other progressive schools had adopted the method with equal success. Another event of the year 1889 makes it a notable one in this history. We refer to the publication of "A Manual of Practical Typewriting" by Mr. Bates Torrey, of Portland, Maine. Mr. Torrey has been already referred to as one of the four pioneers of the touch system. He deserves this place because the manual above mentioned was the first which taught the "touch" method in the exact sense in



BATES TORREY.

which the term is now understood. Mrs. Longley's method was a genuine touch system in its results, but not in its main purpose, which was avowedly to secure an improved method of fingering. Mr. Torrey, however, values the improved method of fingering mainly, we might almost say solely, because it enables the operator to write by touch. This last is substantially the position taken by the present day writers and instructors.

Mr. Torrey also is undoubtedly the originator of the word "touch" as applied to the method. We have used the name in connection with the entire subject because it is the word most generally

used and best understood at the present time. There is no evidence, however, that the term was ever in actual use before the appearance of Mr. Torrey's book. Prior to that time the system was known universally as the "all finger method", a name in fact which it still bears in a number of business schools.

Since the appearance of his first manual in 1889 Mr. Bates Torrey has continued to be one of the most influential advocates and exponents of touch writing. His articles on the subject in the phonographic press have been numerous and important. He has also added the force of example to precept as he is himself an accomplished touch operator. His latest contribution to the subject is his new book "TouCHart or Practical Typewriting", published in 1900. This book is described as presenting "the same unchangeable ideas; only in new language, with the up to date setting of originalities."

Beginning with Mr. Bates Torrey's manual in 1889 the publications on the subject have been numerous. In 1891, after two years' experience in teaching the system, Mr. B. J. Griffin of Child's Business College, Springfield, Mass., published his "Typewriting by Touch" already mentioned; in 1892 Mr. H. W. Lowe of Omaha published his "Typewriting Systematized, A Practical Plan for Learning to Operate the Remington Standard Typewriter by Touch"; in 1893 Mr. Charles H. McGurrin of Kalamazoo, Mich., a younger brother of Mr. Frank E. McGurrin, the pioneer touch operator, published his "Method of Typewriting". Among subsequent publications are systems by Banks of Philadelphia, Fuller of Cincinnati, Barnes of St. Louis, Woodworth of Denver, Mehan & McCauley of Des Moines, Van Sant of Omaha,

Mosher of Omaha, Rutherford of New York, and "The Twentieth Century Typewriter Instructor", published by E. N. Miner of New York. Mr. Rutherford's system includes, in addition to the usual series of exercises, a system of memory aids by which the pupil learns the location of the keys of the Remington Typewriter in a very short space of time. Also worthy of mention is the so-called "'Typo-Touch' Instructor". This device is an ingenious clock work mechanism which shows letters, words and sentences on a continually moving and never ending line, each word remaining only for a moment in the sight of the operator. The device therefore literally compels the operator to write by touch if she writes at all. In addition to all of these, the "Typewriter Lessons", teaching Mrs. Longley's all finger method, are still published at Cincinnati.

We give the above list to show the wealth of material that is now available on the subject as contrasted with the state of things before Mr. Bates Torrey first set the ball rolling in 1889. All of the present day instruction books have excellent features and they give the business educator a wide range of choice in the variations of the method which he may pursue.

It will be noticed, in the list of recent publications, how large a proportion of them come from beyond the Mississippi River. The touch system, like the "course of empire" has made immense strides westward during the past few years. This result has been due mainly to Mr. O. P. Judd, the manager of the Remington Typewriter at Omaha, whose work in behalf of the touch system in the West forms a parallel to that of Mr. Rowell in the East. Mr. Judd became the Remington manager at Omaha in the year 1897. Prior to this date the method

had been taught by Mr. George E. Dougherty of Topeka, Kans., for a short time by Mr. H. W. Lowe at Omaha, and perhaps by one or two additional schools at other points ; but, generally speaking, it seems to have had very little hold in this part of the country. From the year 1897, however, to use Mr. Judd's own words, "Omaha became the storm center of the commotion over the touch method of typewriting". The first person Mr. Judd interested in the system was Mr. A. C. Van Sant who, as early as 1897 and 1898, turned out some competent touch operators on the Remington Typewriter. Subsequently Mr. F. W. Mosher, of Rohrbaugh Brothers' College, also adopted the touch method. Both Mr. Van Sant and Mr. Mosher have published systems of touch writing and their efforts have not only resulted in the development of the system in the West but have been felt in the entire country. The surpassing skill of Mr. Mosher's pupils in particular has attracted wide attention. Some of them are among the very best of the younger touch operators.

Well Known Touch Operators.

During the past few years the number of expert Remington touch operators has increased so rapidly that it is impossible, within the limits of our space, to mention more than a fraction of them even by name. It may perhaps be doubted if any of these younger operators have as yet quite reached the standard of Mr. Frank E. McGurrin, although Mr. McGurrin himself says that the performances of some of them, as reported, fall very little short of his own best records. The graduates of Mr. Griffin's School at Springfield from the very first showed a high standard of proficiency. Mr. Griffin's first pupils by the touch method were Miss Annie B. Kyle and Mr. James N. Glaster, Miss Kyle beginning in 1889. The skill developed by these operators was so great that Mr. Griffin started with the class of 1890 to teach the touch method exclusively. Among the members of this class who became excellent touch operators were Miss Seraph Loomis, Miss Mary H. Day, Miss Etta M. Kennedy, Miss Margaret Longeway and Miss Emma McClure. Miss Helen A. Griffin, who graduated in 1892, and Miss Alice Gardner, who graduated in 1893, are two touch operators who stand in the very front rank. In 1896 Mr. Griffin gave a public exhibition of touch writing on the Remington Typewriter by twenty of his young lady pupils. At this exhibition Miss Griffin and Miss Gardner both made a speed of between 150 and 160 words a minute on memorized sentences and a speed of over 90 words a minute in copying unfamiliar and difficult matter. Miss Griffin was for some

years in the employ of the Warwick Cycle Manufacturing Company, and her work on the machine attracted wide attention.

Better known to the public, however, than any of the above operators is Miss May E. Carrington, who graduated from Mr. Griffin's school in 1893. In the year 1897 Mr. Griffin repeated his exhibition of the year before, on which occasion Miss Carrington did some work on the Remington which is thus described by the *Springfield Union* :

“ She was blindfolded and wrote from dictation 108 words in the space of one minute. The copy was handed into the box occupied by the *Union* representative and proved, upon inspection, to be absolutely without a single error. The words were well spaced, each letter was clear and well defined, which showed the keys to have been struck with a uniform force and exactness.”

We have already spoken of the high quality of the Remington touch operators instructed by Mr. Mosher's system at the Rohrbaugh Brothers' Business College at Omaha. One of these, Miss Edith Paulsen, first came into prominence at the National Shorthand Teachers Association at Chicago in December, 1899. At that time Miss Paulsen had only been a student for a little over four months, much of which had been devoted to the study of shorthand, and yet the beauty, accuracy and even the speed of her work made a deep impression. This single example, not to mention many others, shows that apt pupils require no unreasonable time to master the system. Indeed it is already the testimony of many business educators that the touch system is quite as easily and quickly taught as the old method.

In June, 1900, a notable exhibition of touch writing on the Remington was given by a number of Mr. Mosher's pupils. On copying new matter Miss Cleveland wrote 75 words per minute, Mr. Furlong 79 and Miss Paulsen 85. On copying a circular letter, which was somewhat easier work, Miss Baker wrote 90 words per minute, Mr. Furlong 95, Miss Cleveland 95 and Miss Paulsen 113.

In the same month a similar exhibition by Remington operators was given by the graduates of Barnes Business College of St. Louis,



MISS EDITH PAULSEN.

another school which has obtained notable results with the touch method. This was in no sense a speed exhibition. Nevertheless Mr. C. H. Tolle wrote blindfolded 136 words in 105 seconds without error except the omission of a single space. Miss Edith Hambuechen also wrote blindfolded from dictation and then wrote from copy 170 words in a minute and a half, without apparent effort. Mr. Barnes, in a concluding address, attributed the success of his pupils to the use of the Remington machine. A full report of the occasion is contained in the *St. Louis Republic* of June 2d.

Miss Hambuechen, it should be added, deserves to be mentioned among the leading touch operators. Her capacity for continuous work is especially noteworthy. When writing circular letters she can operate the Remington, for hours at a time, at the rate of over 100 words per minute.

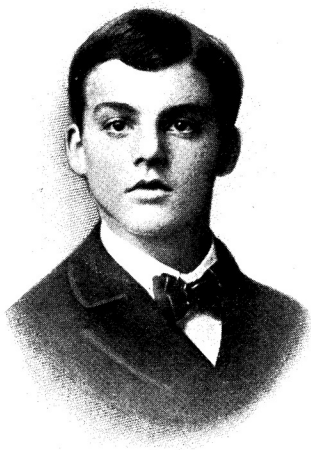


MISS EDITH HAMBUECHEN.

The city of Chicago has also produced some noted Remington touch operators. Among these we should mention Master Charles M. Middendorf a graduate of the Gregg School of Shorthand. Young Middendorf is only a fifteen year old boy, and hardly more than a beginner, but his work at the Detroit Convention was impressively good and there is no question about his future as an expert operator.

The convention of the National Shorthand Teachers Association at Detroit, last December, was the latest occasion which afforded a general opportunity for exhibiting the work of the expert touch operators. At the convention proper so much time was consumed in discussion that the operators themselves got very little chance. A satisfactory test was obtained, however, under the direction of Mr. Thomas P. Scully of Boston,

the editor of the Typewriting Department of *The Gregg Writer*. Of the three Remington touch operators present at this test Miss Schreiner wrote 108 words per minute, Miss Paulsen 106 words, and Master Middendorf 95. These records were made from copy, each writer copying the same matter, which was chosen by Mr. Scully. Two others competed but were unable to equal the work of the Remington operators.



CHARLES M. MIDDENDORF.

In the above review we have mentioned only a few of the leading Remington touch operators. The number of others, however, who are scarcely inferior in ability, could be counted by the score and their ranks are swelling constantly. Long lists of graduates have been received from many business schools which show that hundreds of successful Remington touch operators are now at work in every part of the country. The classes

which graduate this year will add to the number hundreds more. Remington touch operators have ceased to be a novelty; they

will soon cease to be even the exception ; perhaps it will not be long before they are the rule.

Our review of the work of the schools, like that of the operators, has been incomplete and fragmentary. The number of business educators who are now teaching the touch method with energy and success has recently become so large that, like the expert operators, their enumeration is not practicable within the limits of these pages. We have been compelled to confine ourselves almost entirely to the pioneers, thus passing over a number of business schools whose contributions to the subject have been highly important. It is sufficient to say that many progressive schools followed closely on the heels of the pioneers and are now teaching the touch method with equal success.

Concerning the present status of touch typewriting we have a word to say in the concluding pages.

Present Status of Touch Typewriting.

Messrs. Wyckoff, Seamans & Benedict recently instituted systematic inquiries with a view to ascertaining definitely the extent to which the touch system was in common use. Information was received from every important center in the country and the result was a surprising revelation of the spread of the system. The stage of progress was of course different in different territories. By averaging the matter, however, it was found that at least one-half of the schools from which reports were received were then teaching the touch method to a greater or less extent and a fair proportion of these had adopted it to the exclusion of all other systems. Of the remaining half an overwhelming majority announced their intention of beginning the teaching of the system with the Fall term. The schools which expressed themselves as opposed to the system were so few in number that they constituted the rare exceptions.

Inquiries made at the same time to ascertain the machine used or preferred for the touch method showed results which were equally convincing. In almost exactly 90 per cent. of the cases the verdict was given for the Remington. Few need be told the reasons for this overwhelming sentiment. The main one of course is the compact keyboard. Every one of the keys may be spanned by the fingers, without arm or wrist movement. At the very beginning of touch writing this advantage was strongly emphasized by Mr. Frank E. McGurrian and has been subsequently recognized by every one of the

noted operators. The Remington also possesses two other advantages for touch writing which are equally decisive, namely the slightness of the key depression and the lightness and evenness of the touch. The importance of these features is illustrated by the old analogy of piano playing. Good piano playing would be impossible on an instrument which lacked these qualities and in the case of touch writing the same rule holds. Even operators by the old method know, many of them, that an uneven touch is an unmitigated nuisance. It renders high speed impossible and good work next to impossible. In the case of the touch system the disadvantages of an uneven touch are increased, because the essential principle of touch writing demands the use of all the fingers under exactly even conditions. Touch writing, in short, compels an even pressure of all the fingers and therefore demands an even response from all the keys. The same general principles apply in the case of the key depression. A deep key depression, however light the general action, always makes what operators call an "unpleasant" touch. In the case of touch writing, where the fingers always remain close to the keys, it stands to reason that the depression must be reduced to the minimum if good or rapid work is to be done.

The superior evenness of the Remington touch is a matter of common knowledge; the slightness of the Remington key depression, surpassing in this respect that of every other writing machine, is a fact which anyone can determine by the experiment of a moment; the advantages of the compact Remington keyboard are too well established to require further comment. These three considerations, therefore, are

sufficient to account, and more than account, for the almost universal preference for the Remington among touch operators.

We have spoken of the main advantage enjoyed by all touch writers, namely that they are able to write continuously, without taking their eyes from the copy. Another advantage is found in the superior quality of their work. The uneven lettering seen in the work of the majority of old style operators is never found in the case of touch writers. There is no "embossing" of letters or periods on the reverse side of the paper. Every key receives exactly the same stroke and the result is a quality of work which is a revelation to operators trained in other schools. In the many recent exhibitions by touch operators the quality of the work has excited quite as much comment as the speed of the operator. These two factors, superior speed and superior work, give the touch operators an advantage which will be certain to have its effect in the positions which they are able to command.

Are these advantages to be attained without extra labor? The opinion of business educators is not unanimous on this point but the weight of testimony, at least among those who have had experience in teaching the system, is that good touch writing is learned as easily and quickly as any other method. These results are due of course to the excellence of the systems now in use. The great object is to avoid drudgery and this is done by giving exercises to the pupils which develop the use of all the fingers and familiarize them with the keyboard in a very short space of time. The great stumbling block of many students of the touch system is the desire quickly to acquire a high speed. This is not easily done and it is hardly desirable that it should be done.

We have already shown that slow speed in touch writing counts for more than a higher speed by the old method. It is better to write thirty words a minute, keeping the machine going all the time, than to make double the speed and waste half of the time looking at the copy. For the same reason it is better to write thirty words a minute and do it accurately than to make twice the speed and then waste the same time in making corrections. Accuracy is always the first consideration ; speed is the second. Let the operator once acquire the capacity to write with perfect accuracy by the touch method and speed will come in due time and as a matter of course.